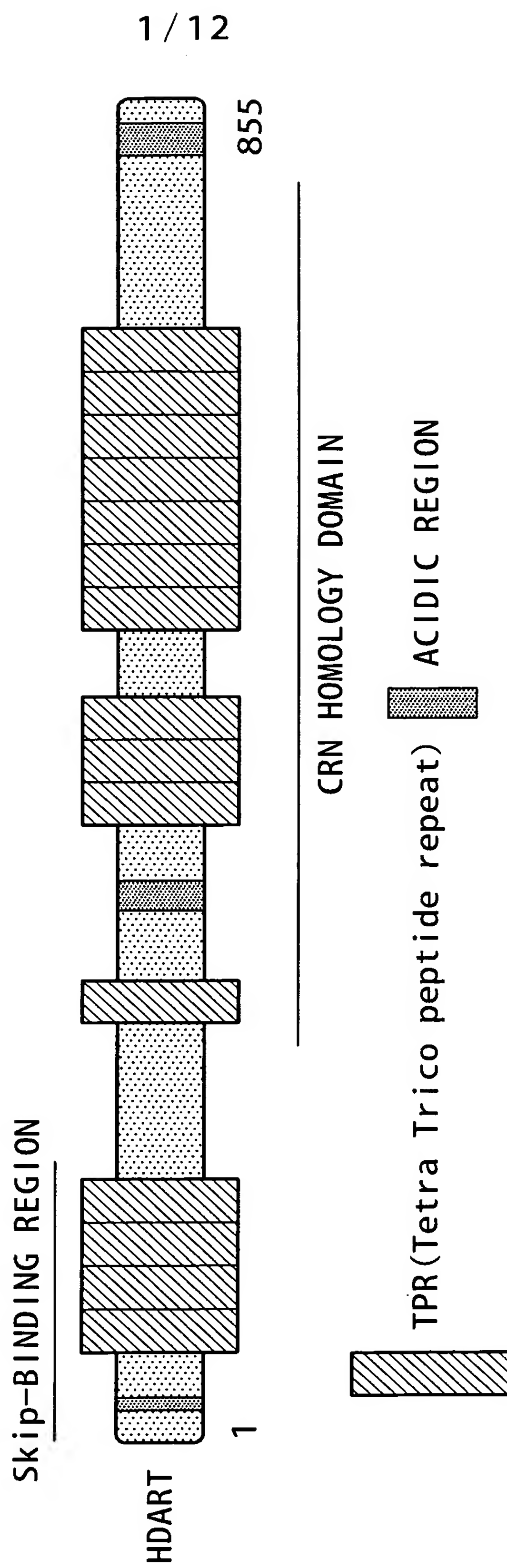


FIG. 1



F I G . 2

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Score = 75.5 bits(184), Expect = 3e-12

Identities = 134/589(22%), Positives = 228/589(37%), Gaps = 127/589(21%)

HDART: 262 LADYYIRSGHFEKARDVYEEAIRTVMTVRDFTQVFDSYAQFEESMIAAKMETASELGREE 321
 L DY +R R +E+ IR TV + YAQ+EES+ +++ A +
 CRN : 208 LNDYKLRK-----RKT FEDNIRKNRTV---ISNWKY AQWEESL--KEIQRARS IYERA 256

HDART: 322 ED----DVDLELRLARFE----QLISRRPLLLNSVLLRQNP HHVHEWHKRVALHQGRPRE 373
 D ++ L L+ A E Q+ R + ++ P W+K + E
 CRN : 257 LDVDYRNITLWLKYAEMEMKNRQVNHARNIWDRAITTL--PRVNQFWYKYTYME-----E 309

HDART: 374 IINTYTEAVQTVDPFKATGKPHTLWVAFK FYEDNGQLDDARVILEKATKVNFKQVDDLA 433
 ++ A Q + + W ++ F ++D AR I E+ F V
 CRN : 310 MLGNVAGARQVFERWMEWQPEEQAWHSYINFELRYKEVD RARTIYER-----FVLVHPDV 364

HDART: 434 SVWCQCGELELRHENYDEALRLLRKATALPARRAEYFDGSEP VQNRVYKSLKVWSMLADL 493
 W + E +H + A ++ +A E+F G E + +Y + A
 CRN : 365 KNWIKYARFEEKHAYFAHARKVYERAV-----EFF-GDEHMD EHLVAF-----AKF 410

HDART: 494 EESLGT FQSTKAVYDRILDLRIA---TPQIVINYAMFLEE HKY----- 533
 EE+ F+ + +Y LD RI+ ++ NY +F E K+
 CRN : 411 EENQKEFERVRVIYKYALD-RISKQDAQELFKNYTIF--EKKFGDRRGIEDIIVSKRRFQ 467

HDART: 534 FEESFKA-----YERGISL FKWPNVSDIWSTYLTKFI- 565
 +EE KA YER I+ W Y+ +I
 CRN : 468 YEEEVKANPHNYDAWFDYLR LVESDAEAEAVREVYERA IANVPPIQEK RHWKRYIYLWIN 527

HDART: 566 ----ARYGGRKLERARDLFEQALDGCPPK---YAKTLYLLYAQLE---EEWGLARHAMAV 615
 + ER R +++ +L+ P K +AK +++LYAQ E + LAR A+
 CRN : 528 YALYEELEAKDPERTROVYQASLELIPHKKFTFAK-MWILYAQFEIRQKNLSLARRALGT 586

HDART: 616 YERATRAVEPAQQYDMFNIYIKRAAEIYGVTHTRG IYQKAIEVLSDEHAREMC---LRFA 672
 ++ + +F +YI+ ++ R +Y+K +E E C ++FA
 CRN : 587 -----SIGKCPKNKLFKVYIELELQLREFDRCKLYEKFLEF-----GPENCTSWIKFA 635

HDART: 673 DMECKLGEIDRARAISFCSQICDPR--TTGAFWQ TWKDFEVRHGNEDTIKEMLRIRRSV 730
 ++E LG+IDRARA IY I PR W+++ DFE+ E+T + RR +
 CRN : 636 ELETILGDIDRARA IYELA--ISQPR LDMPEVLWKS YIDFEIE--QEETERTRNL YRRL 691

HDART: 731 QATYNTQVNF MASQMLKVSGSATGT VSD LAPGQSGMDDMKLLEQRAEQL 779
 Q T + +V +Q SG + M+ E++ E+L
 CRN : 692 QRTQHV KVVISFAQFELSSGKEGSLTKCRQIYEEANKTMRNCEEKEERL 740

FIG. 3

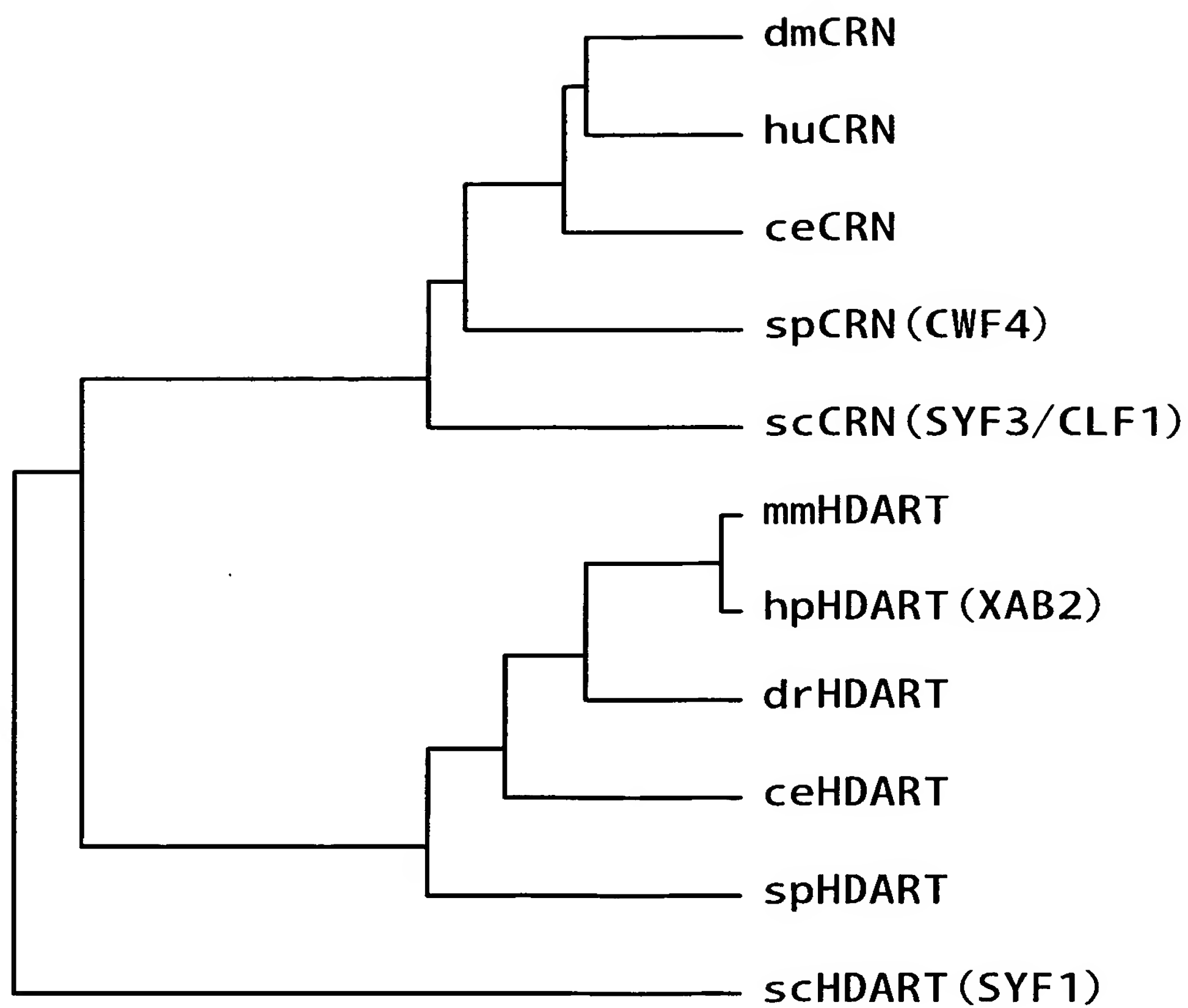


FIG. 4A

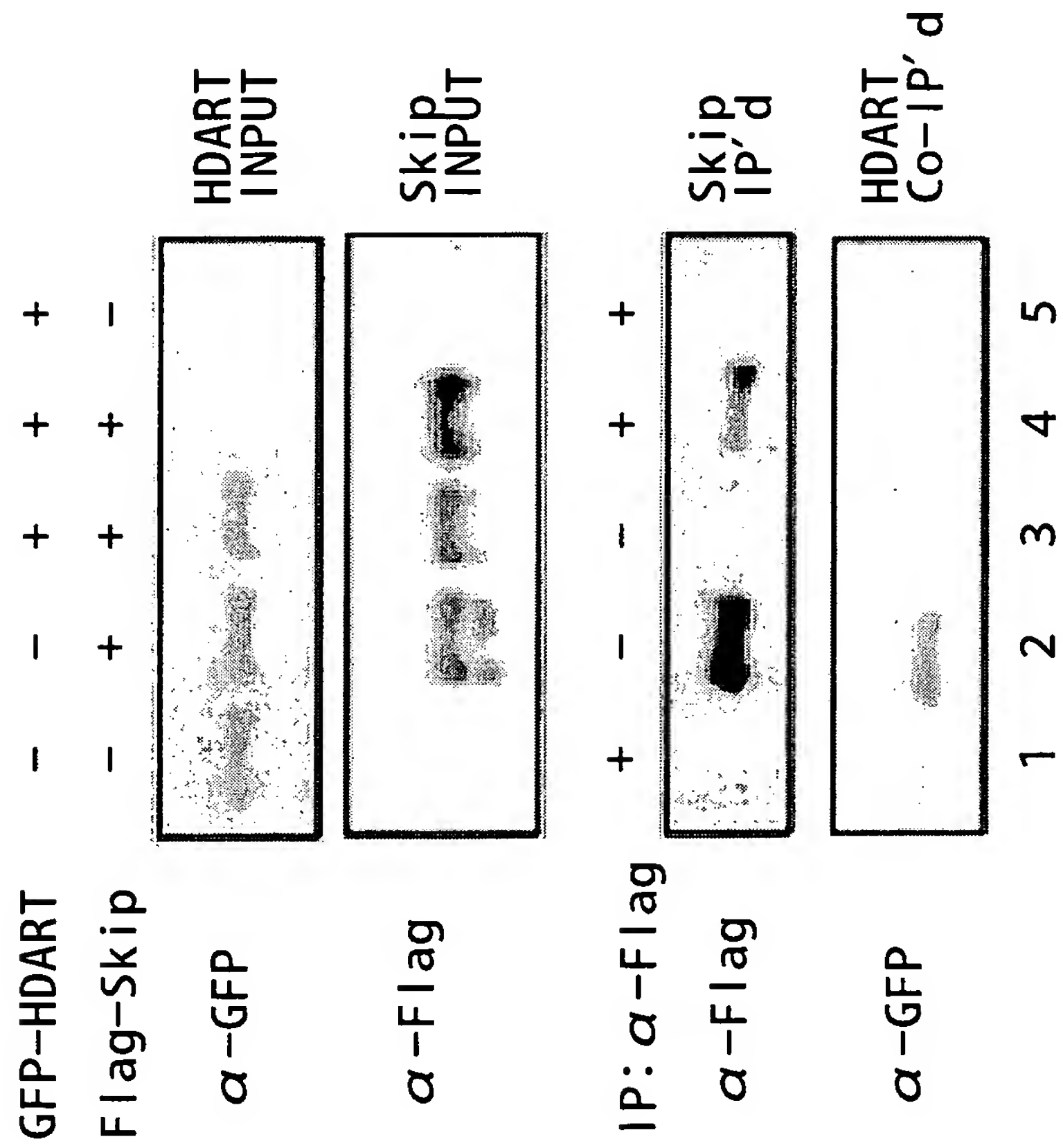


FIG. 4B

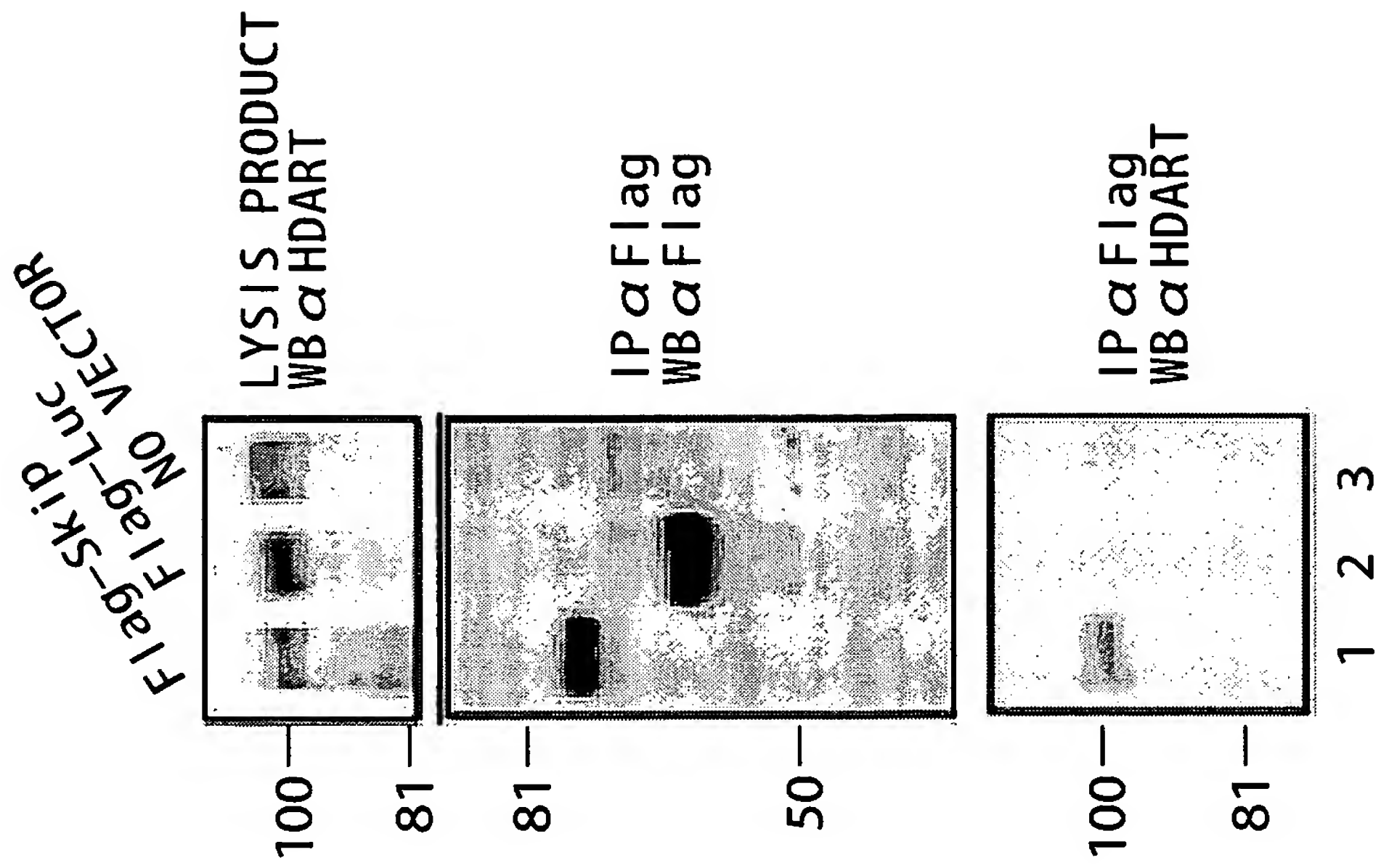


FIG. 5A

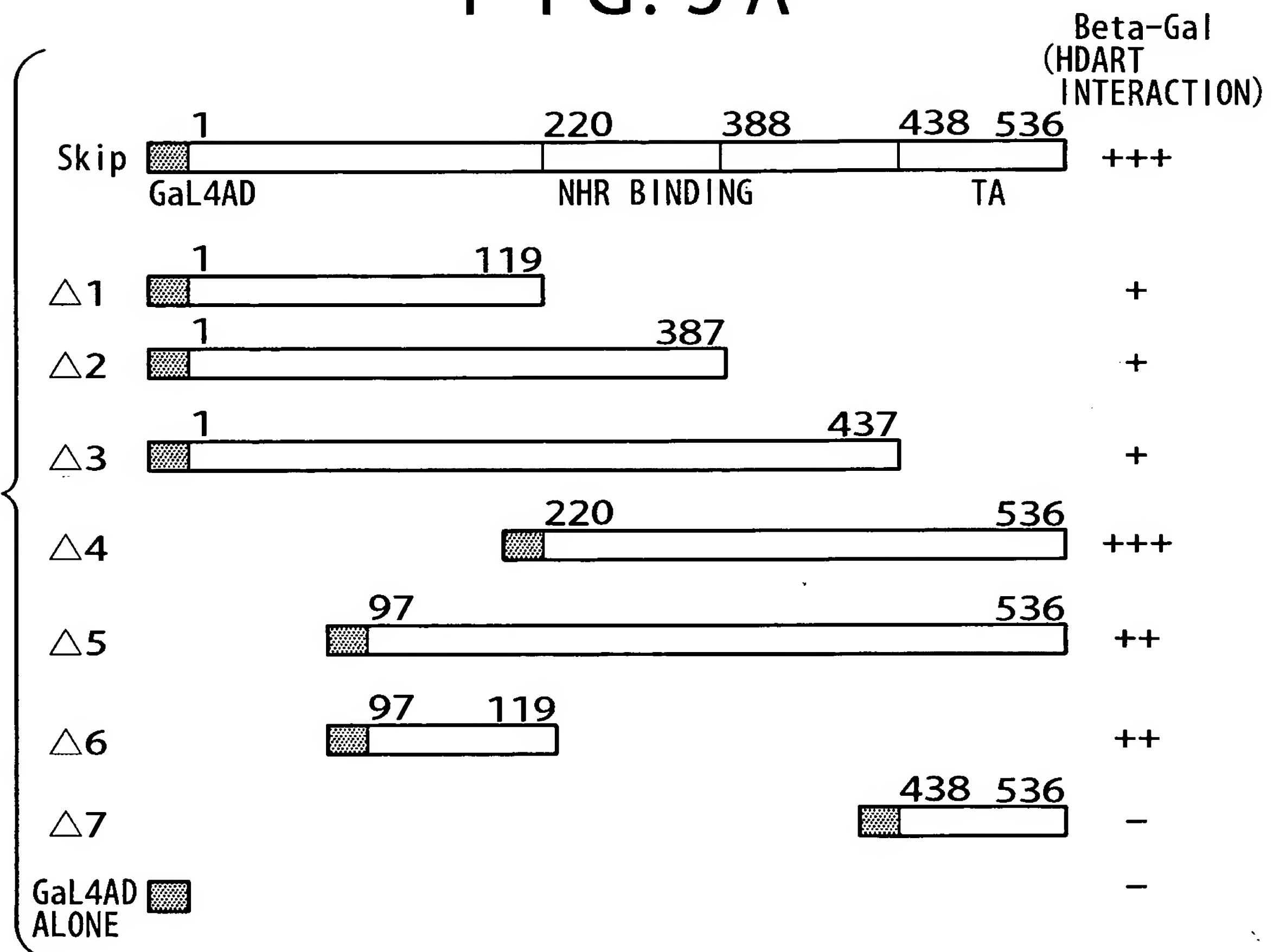
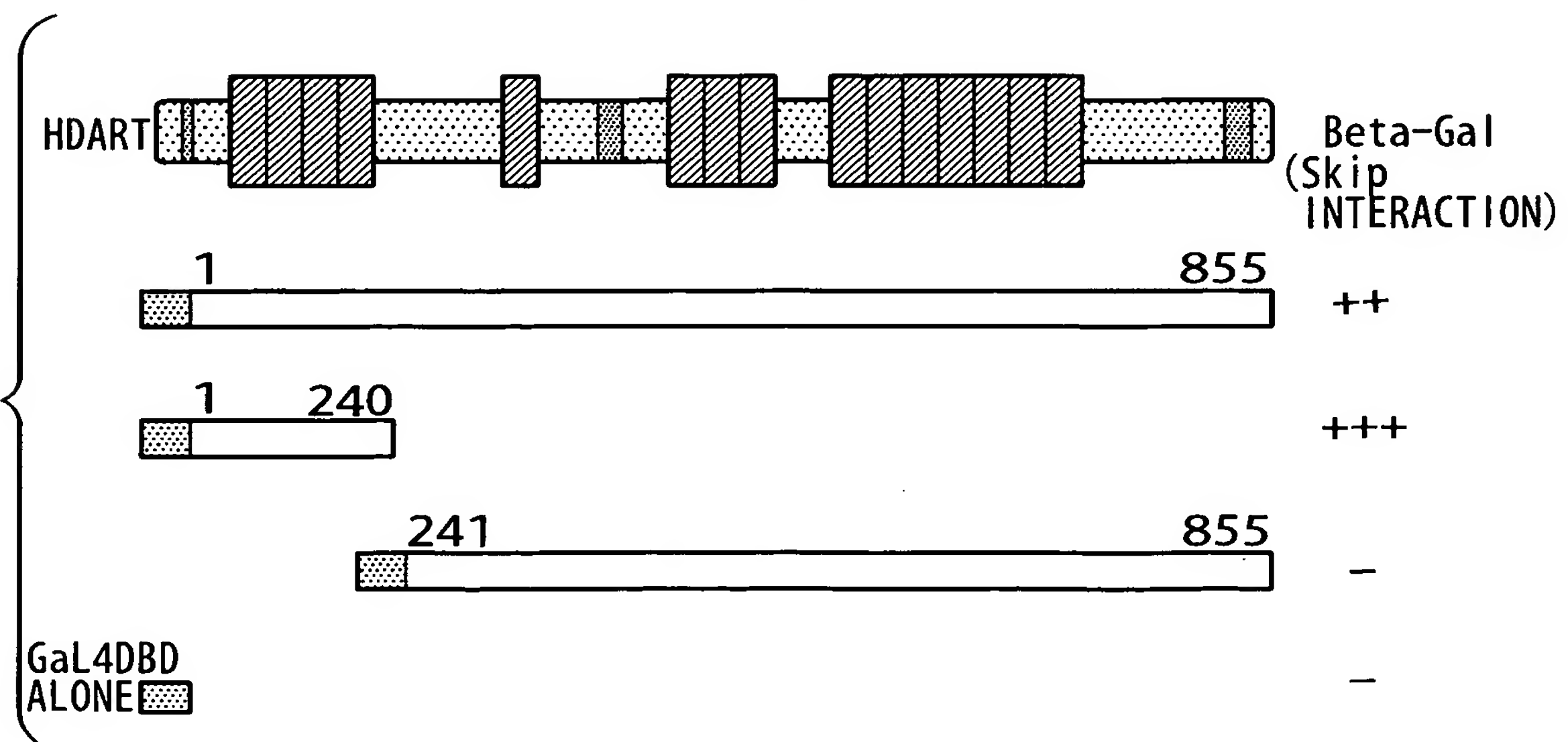


FIG. 5B



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FIG. 6 A

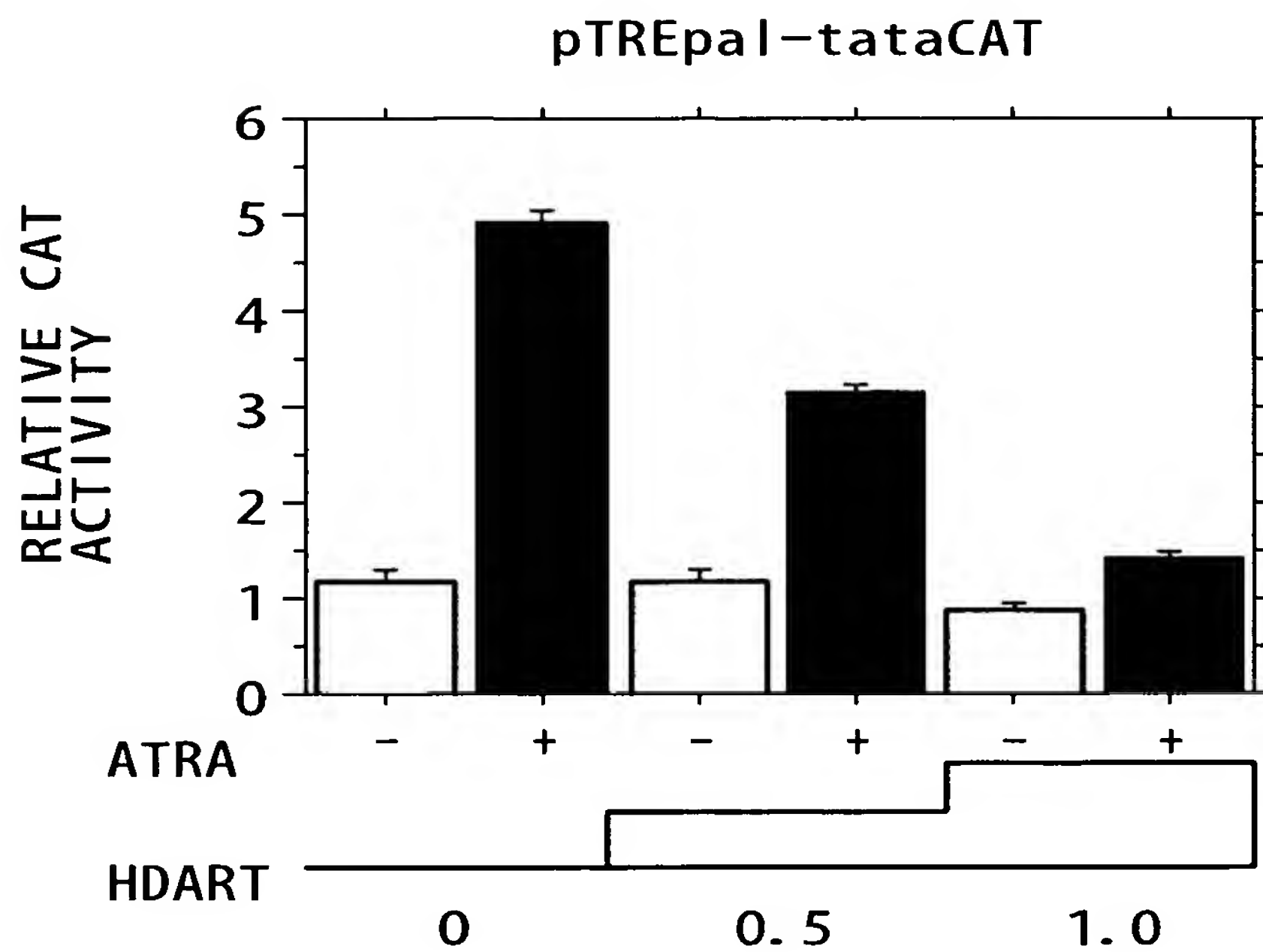
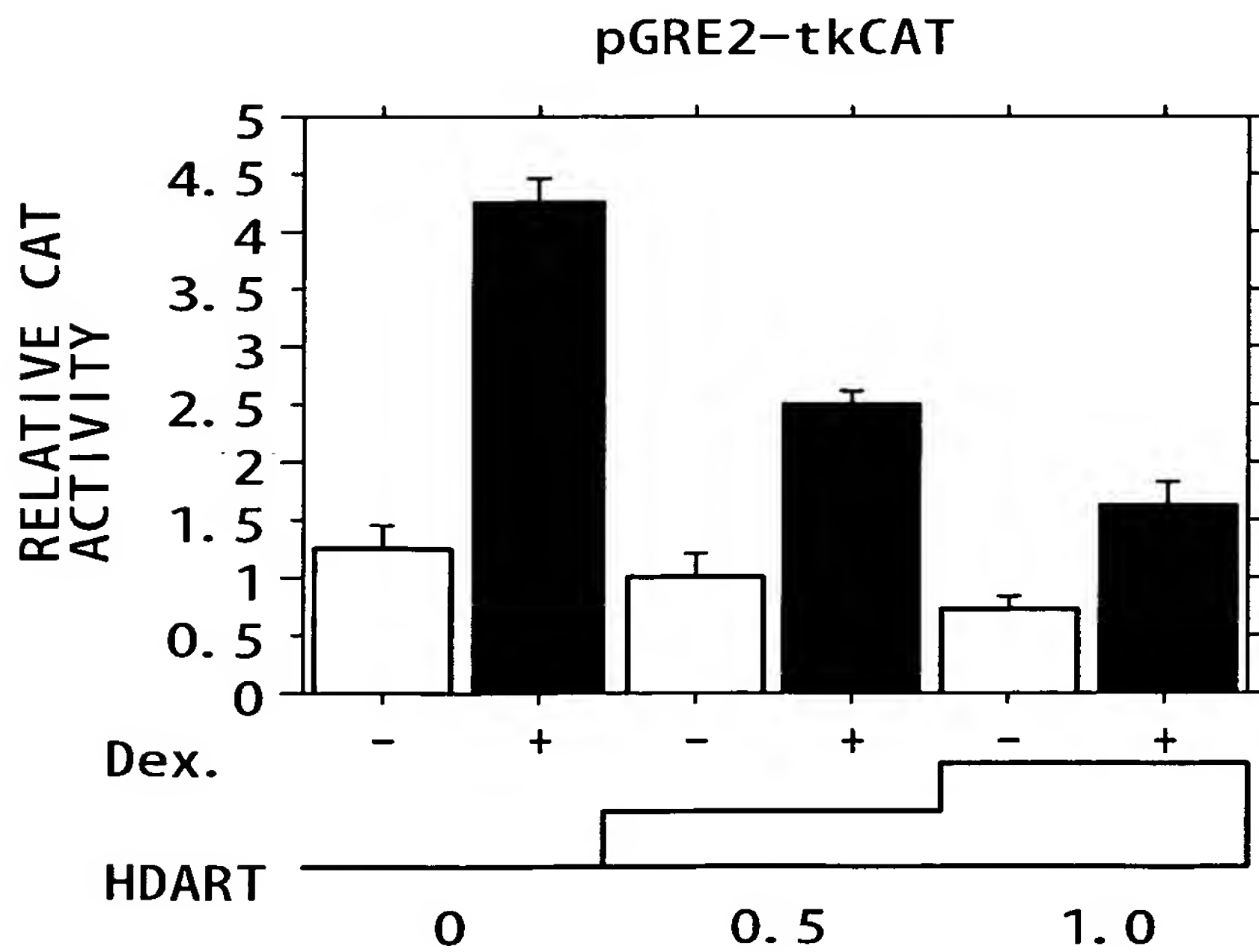


FIG. 6 B



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FIG. 7A

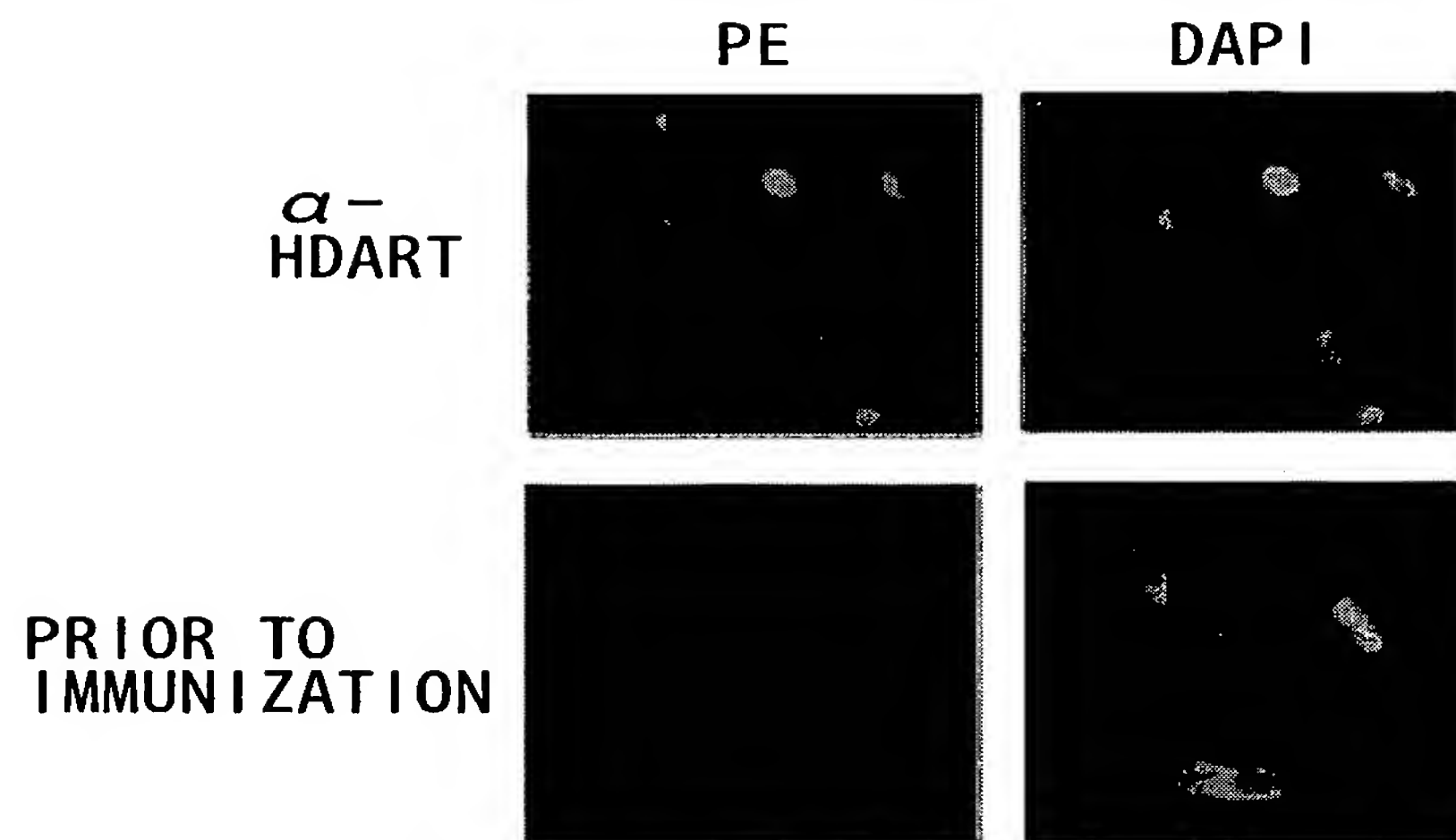


FIG. 7B

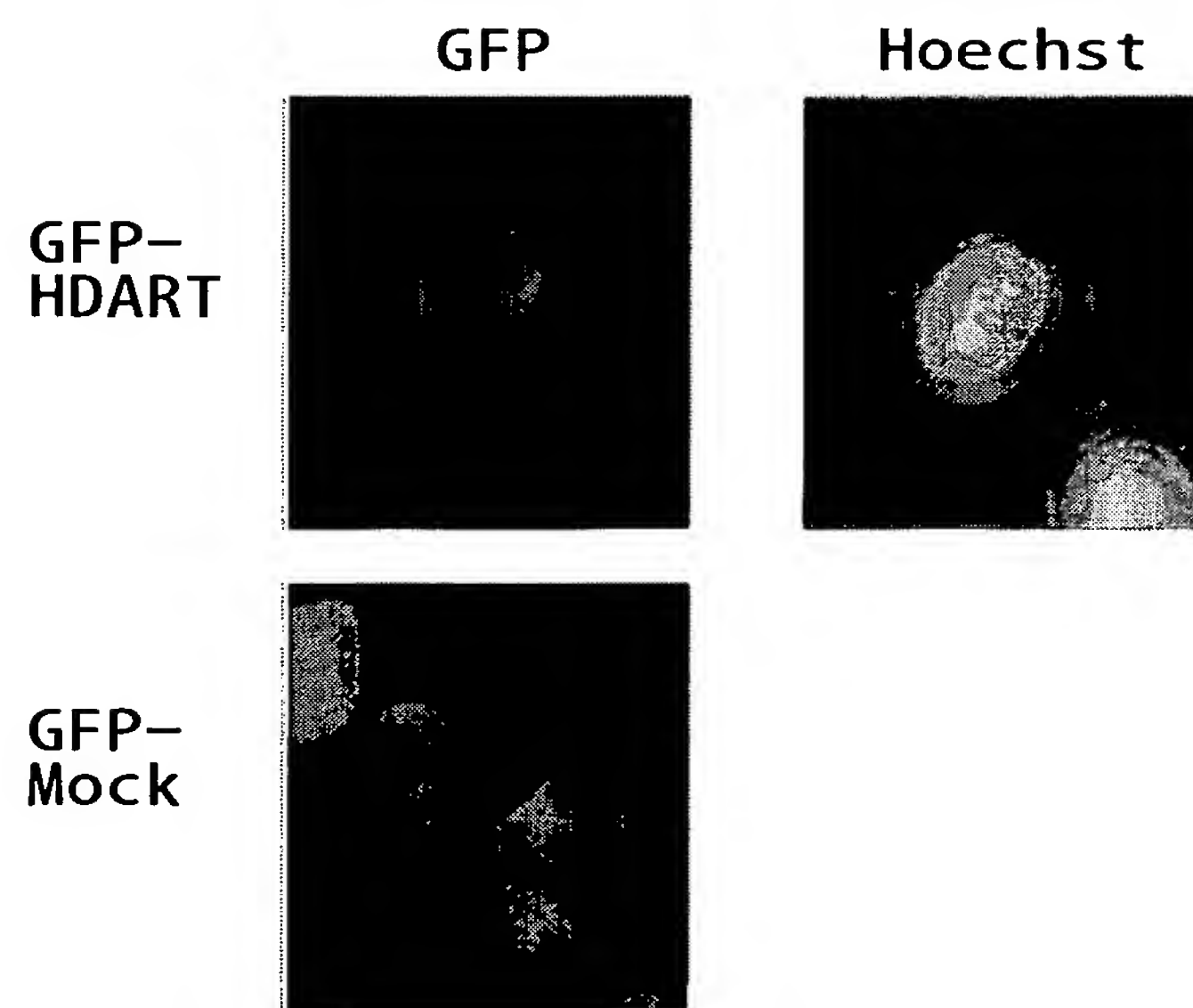


FIG. 8A

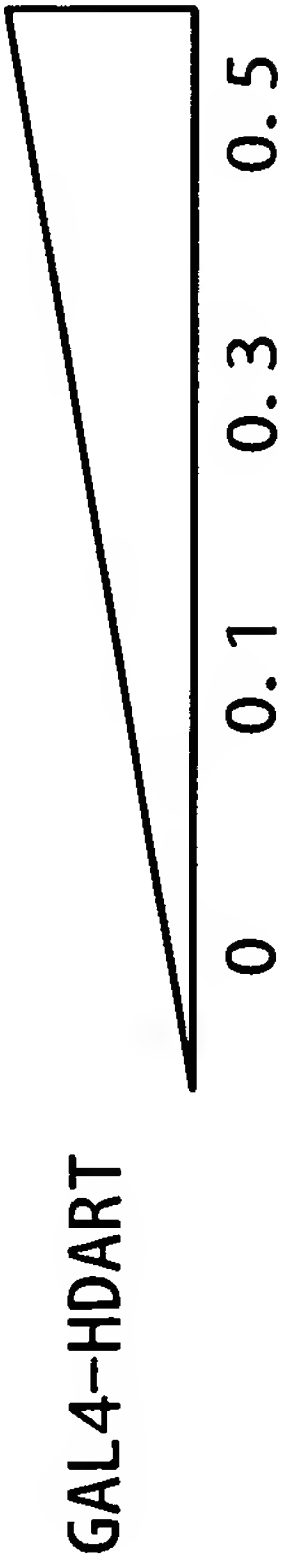
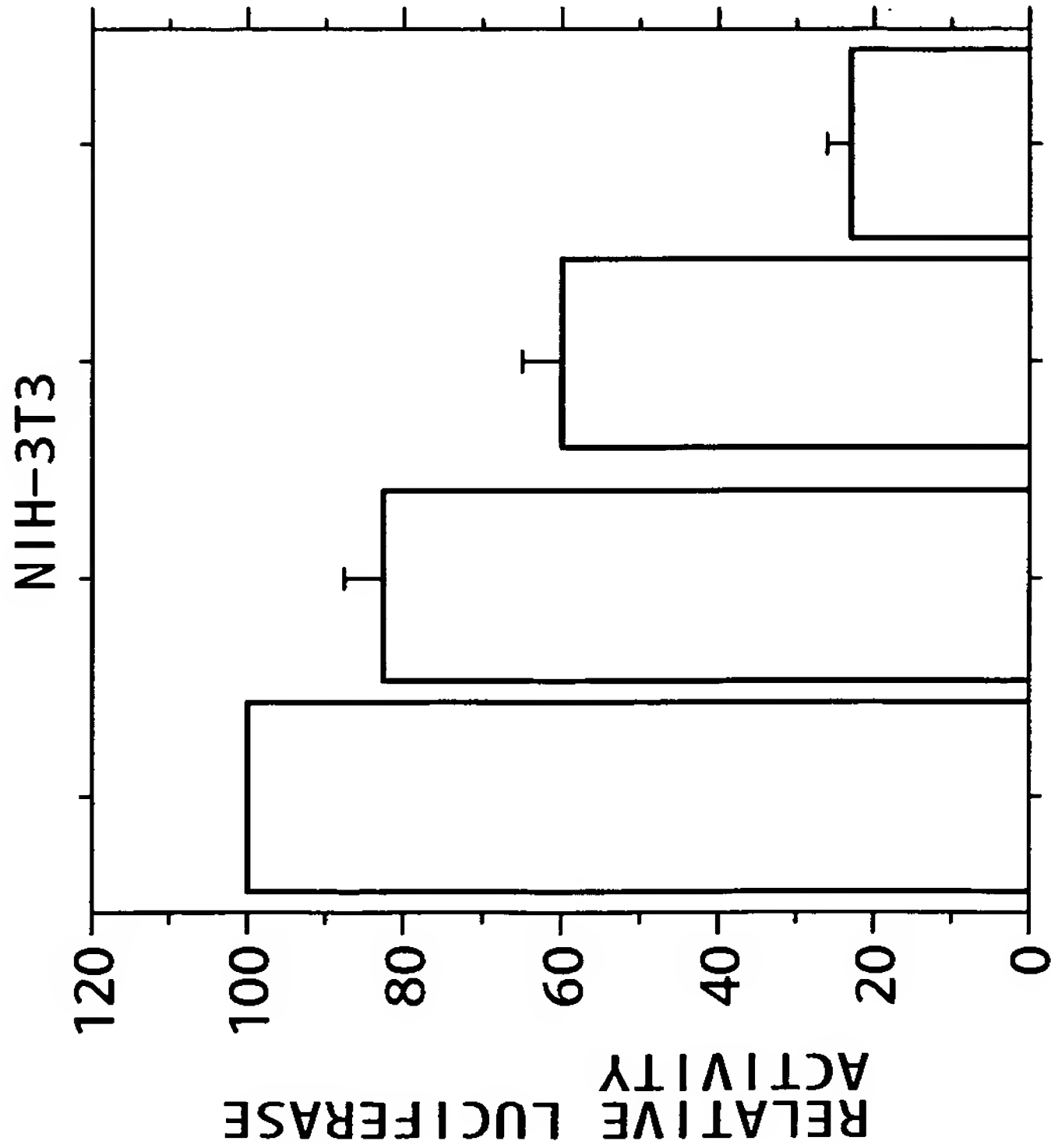


FIG. 8B

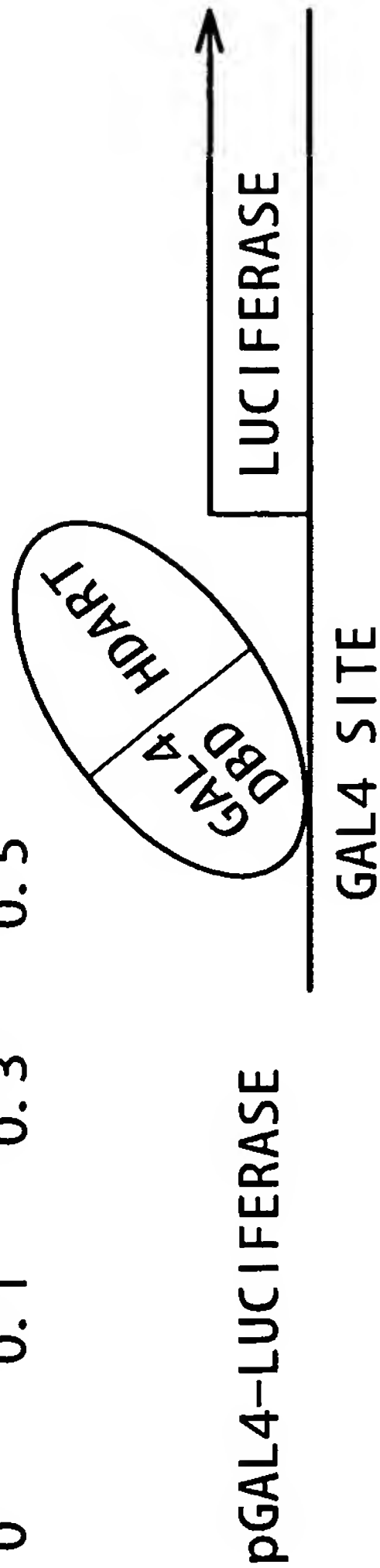
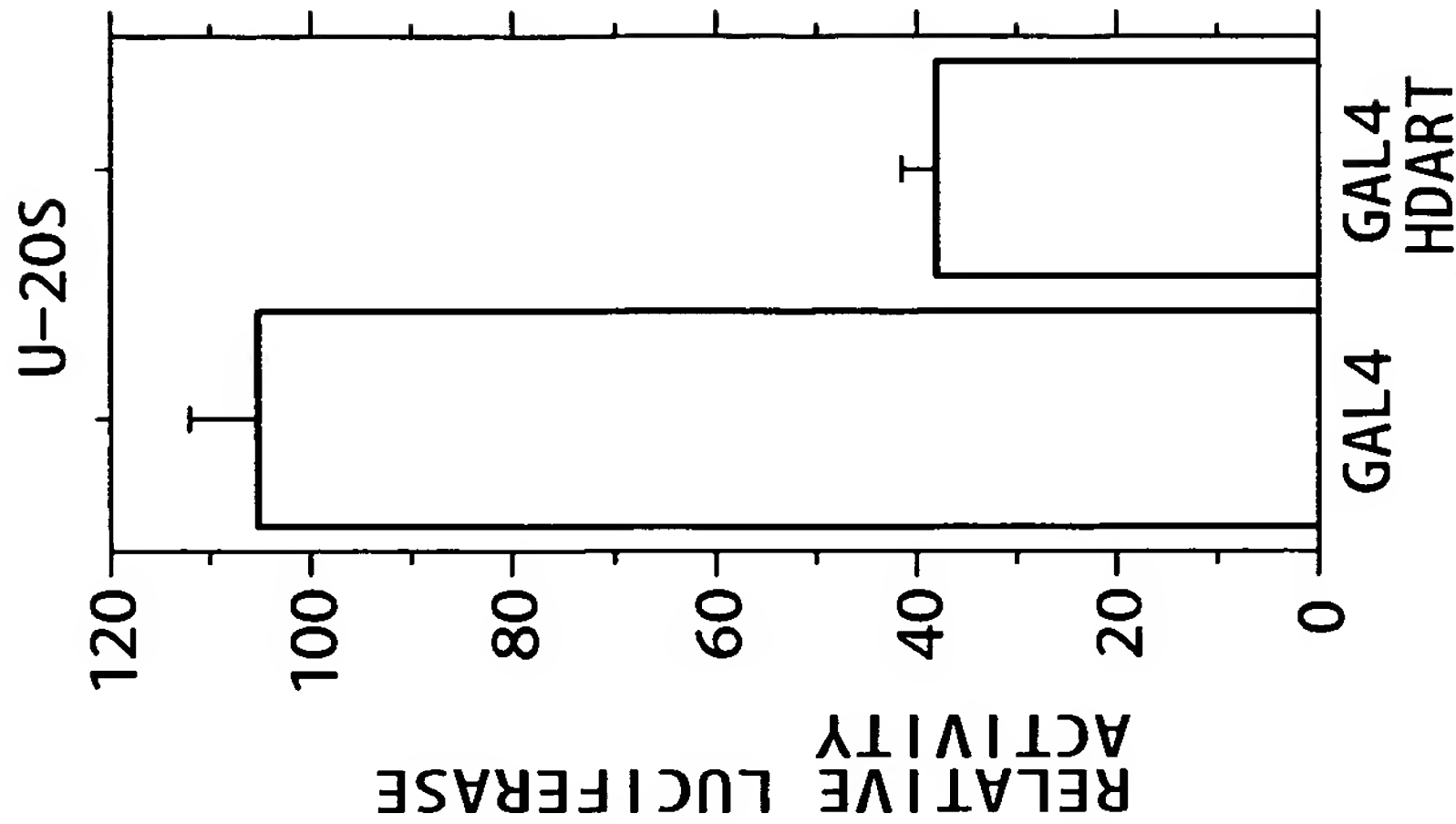


FIG. 9A

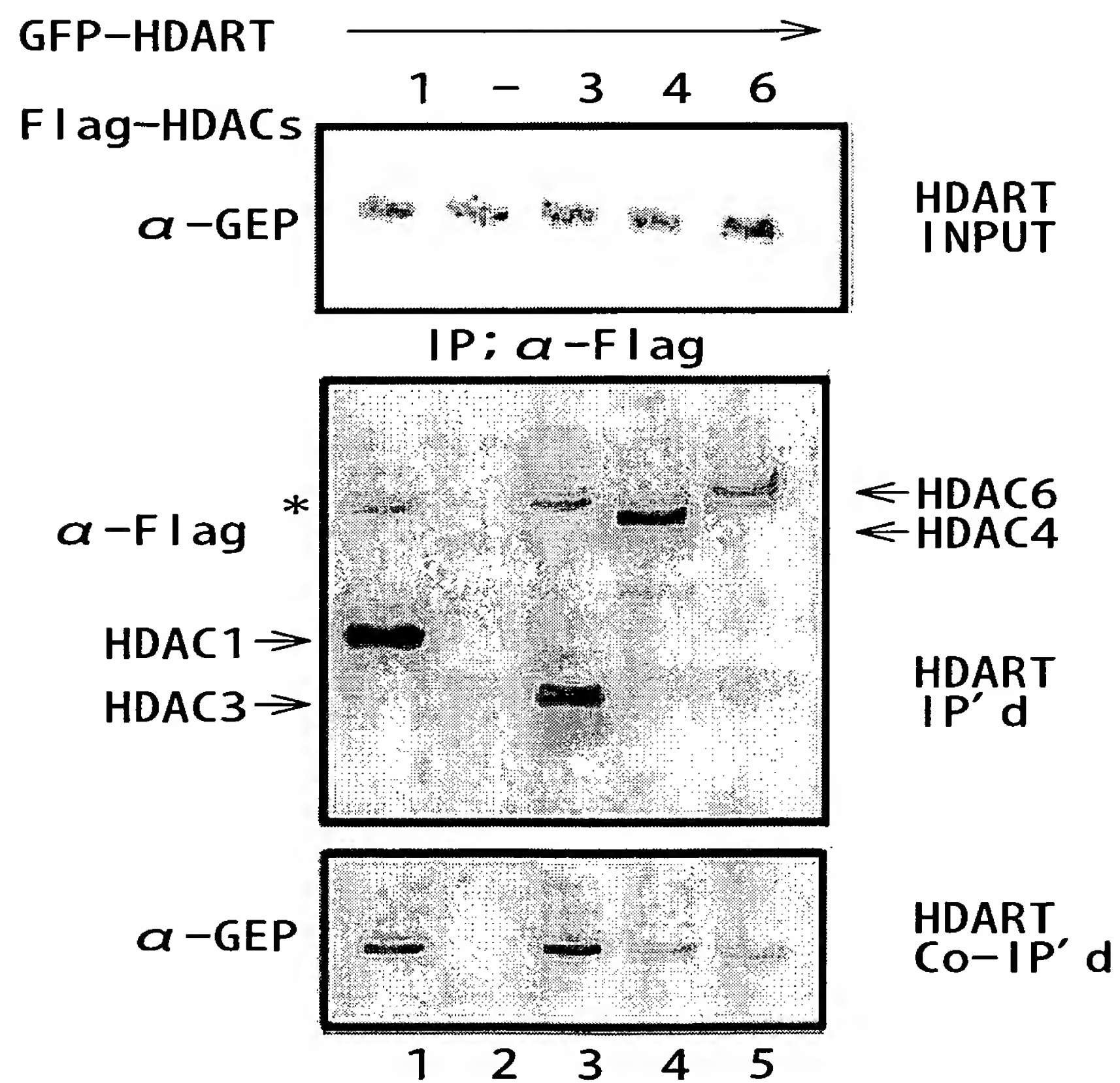


FIG. 9B

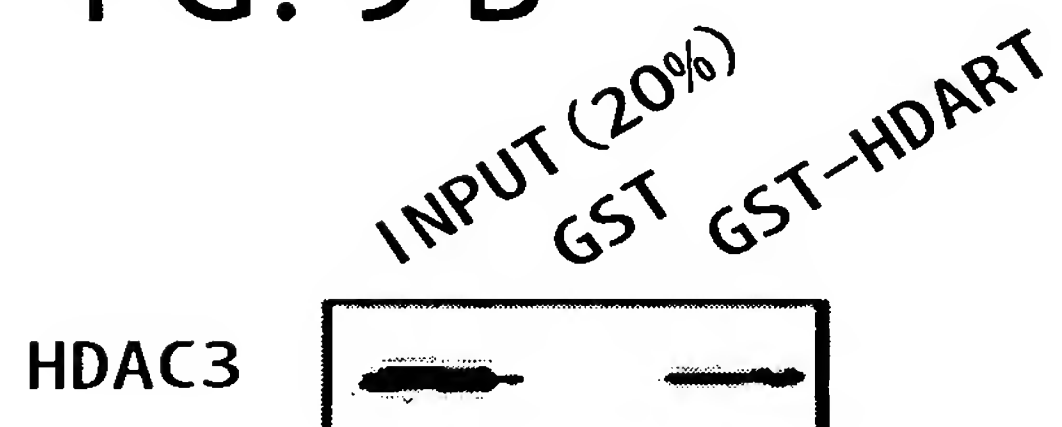


FIG. 10A

pTREpal-tataCAT

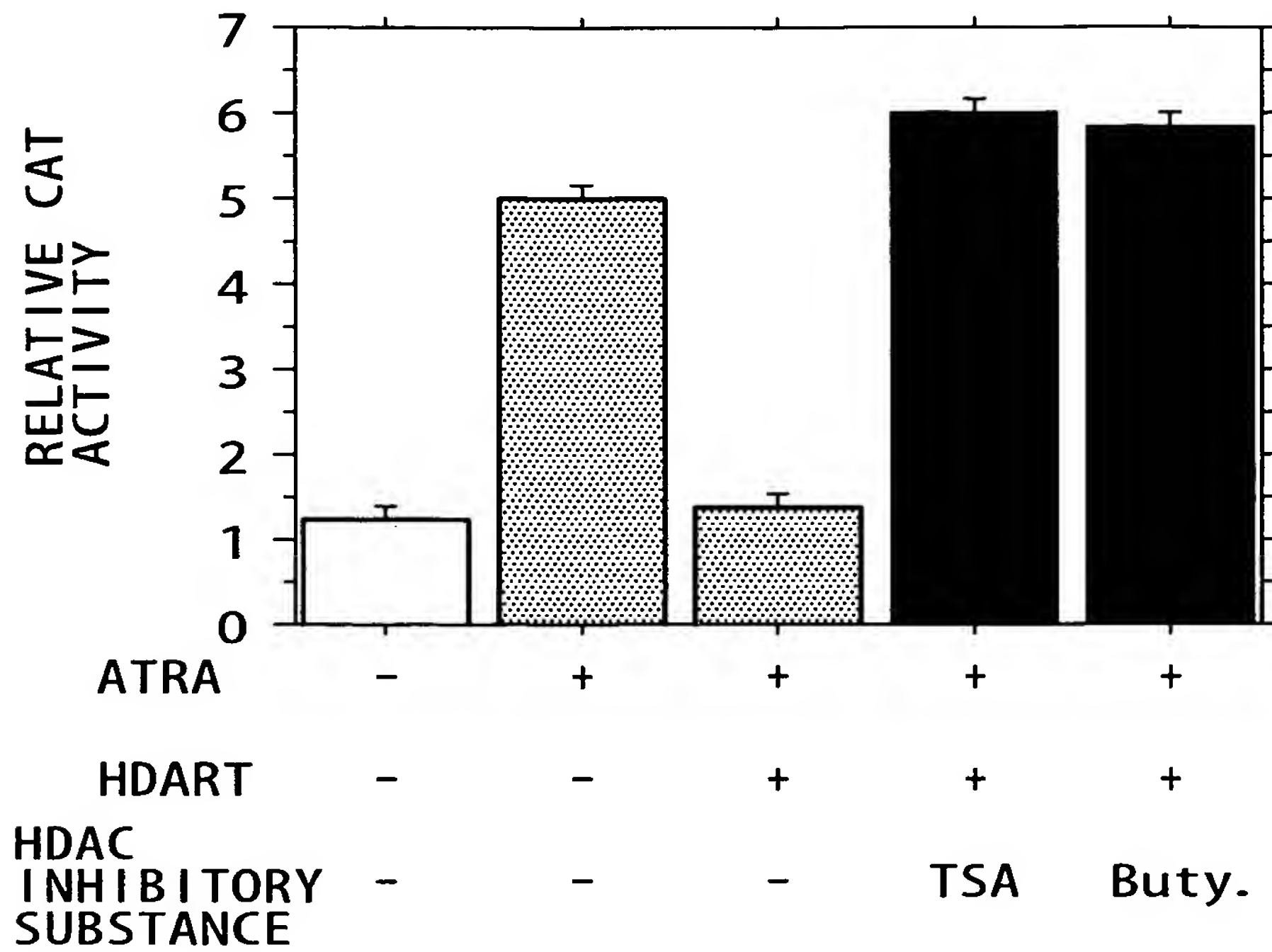


FIG. 10B

pGRE2-tkCAT

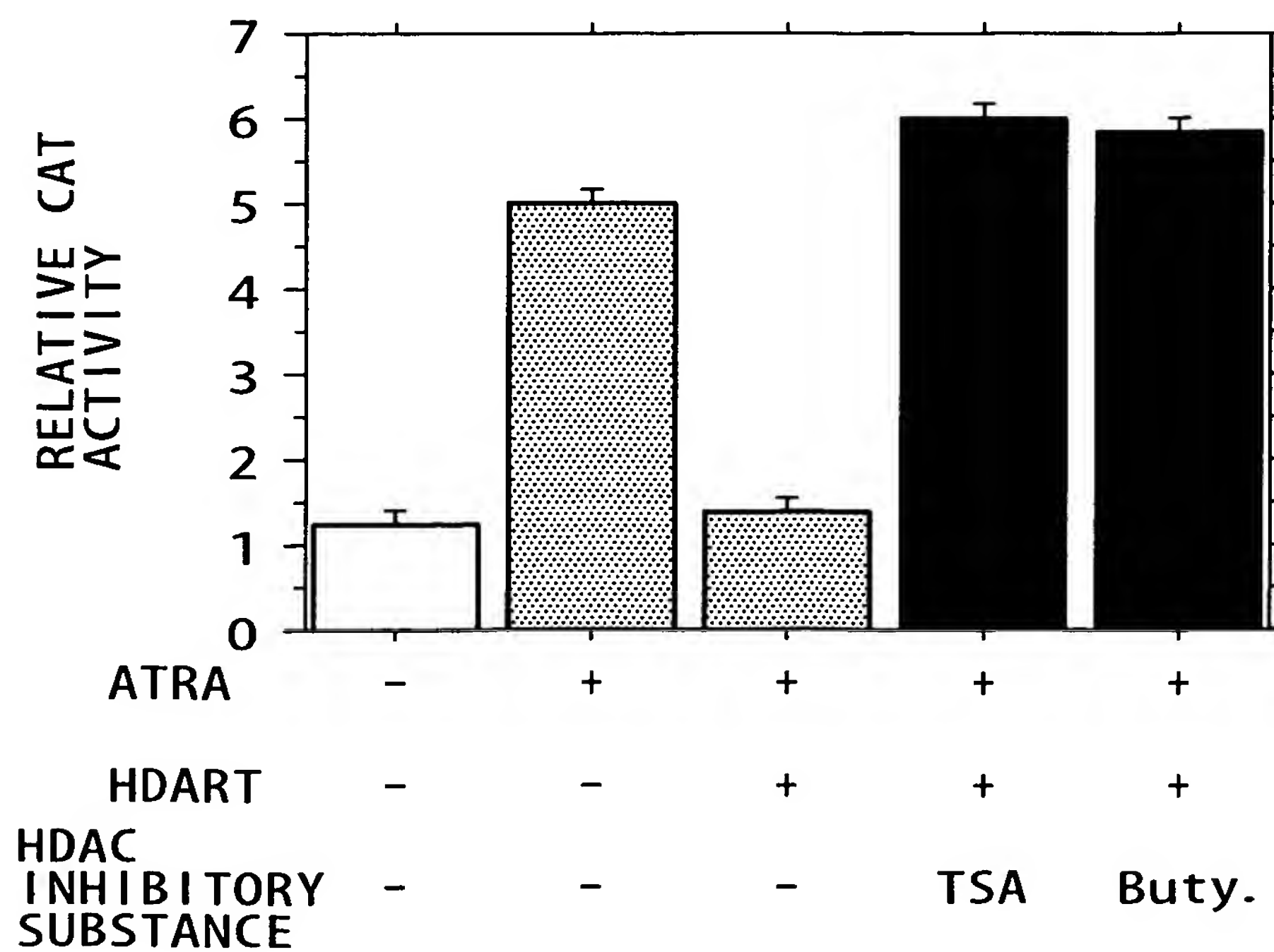


FIG. 11A

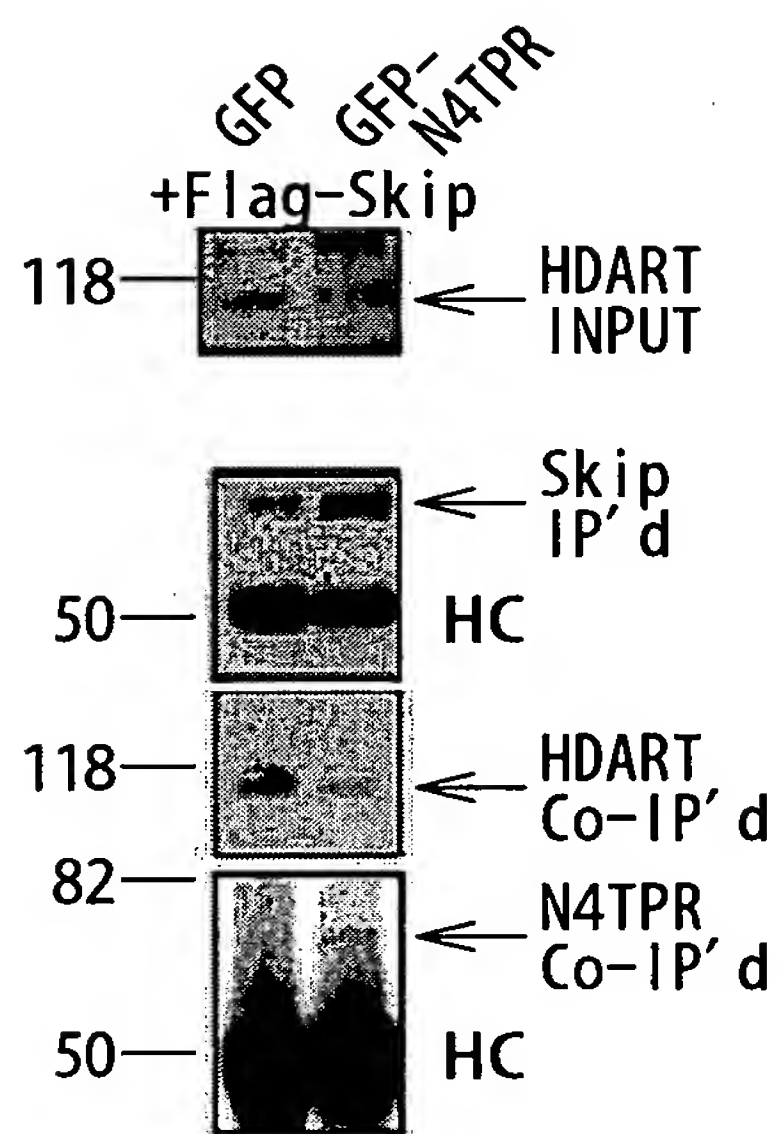


FIG. 11B

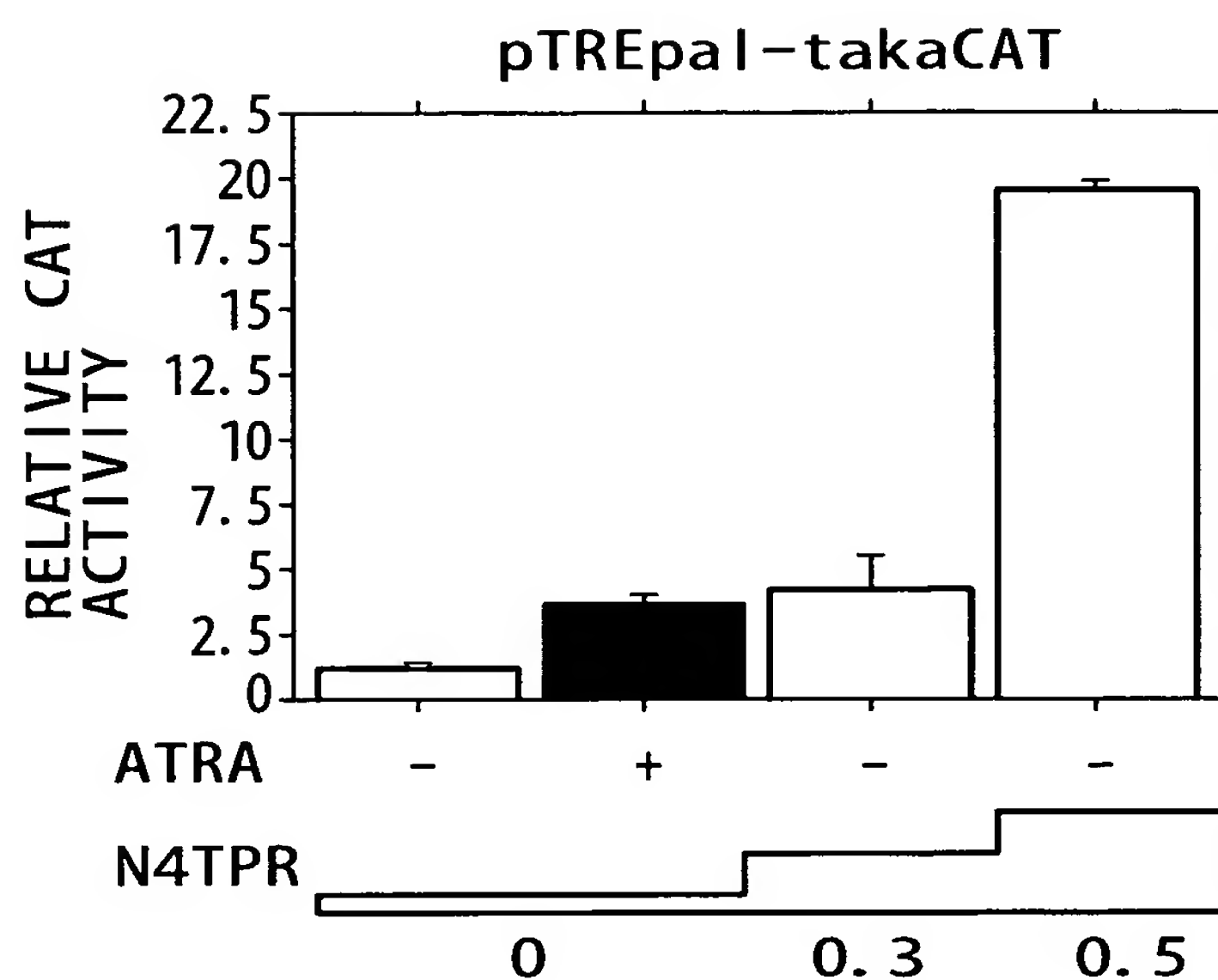


FIG. 11C

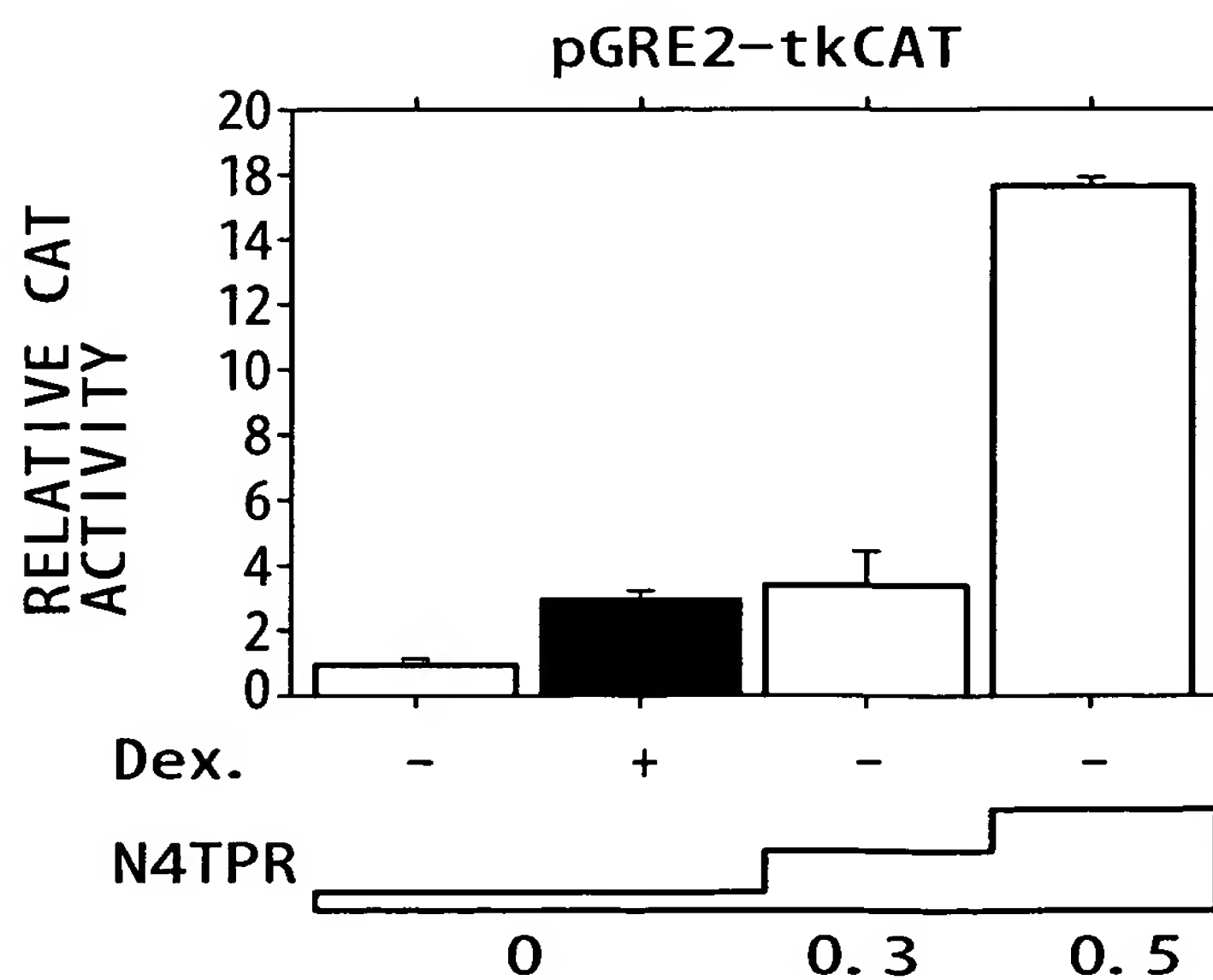


FIG. 12A

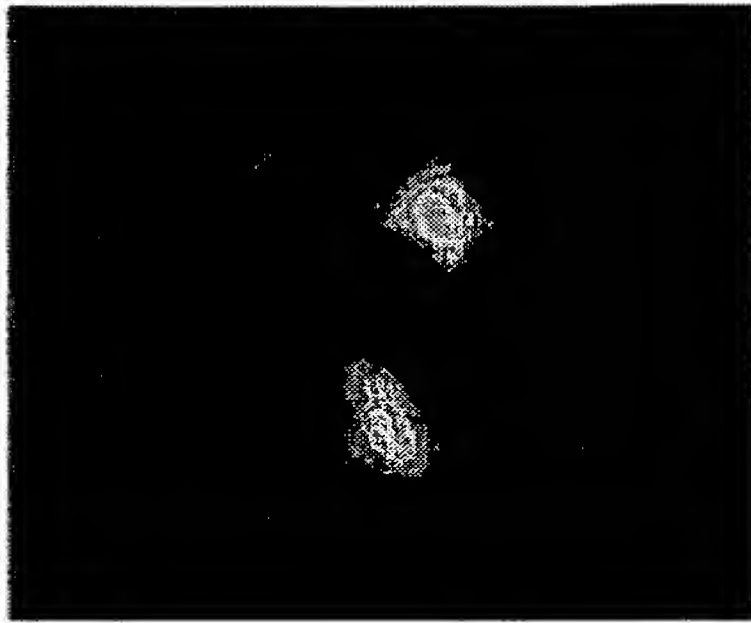


FIG. 12B



FIG. 12C

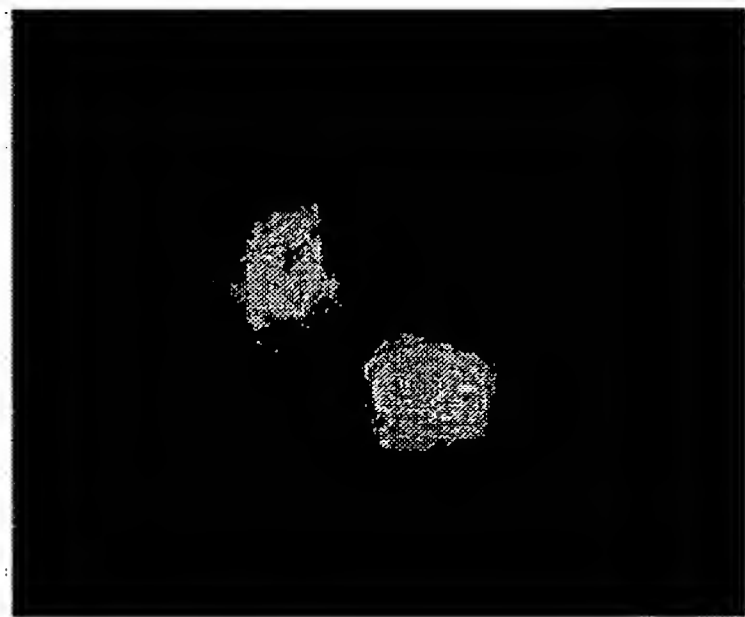


FIG. 12D

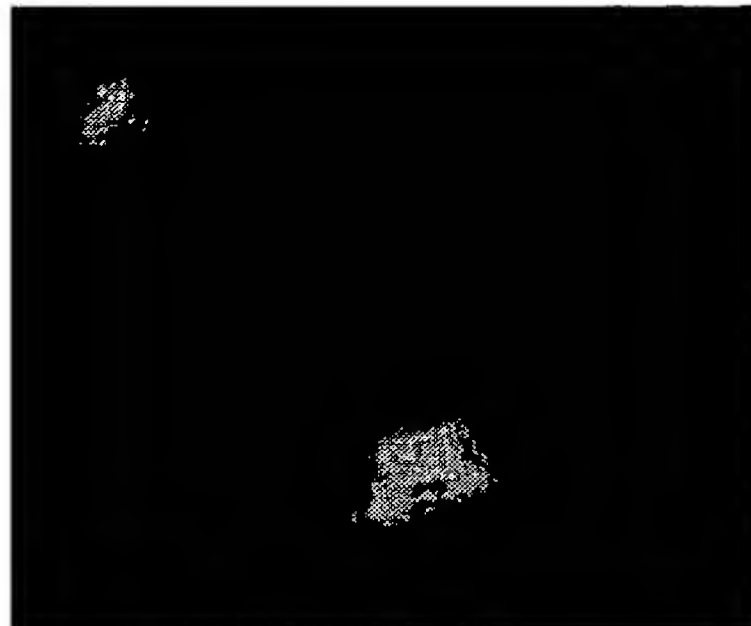


FIG. 12E

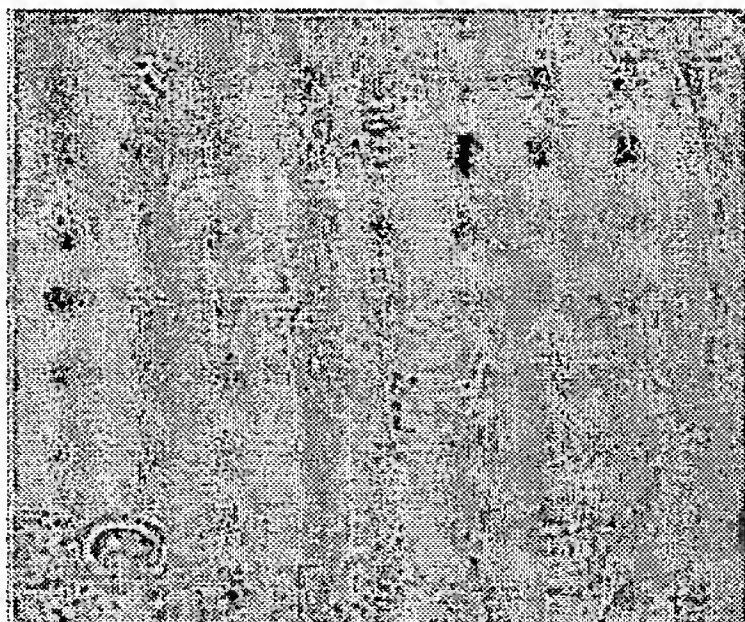


FIG. 12F

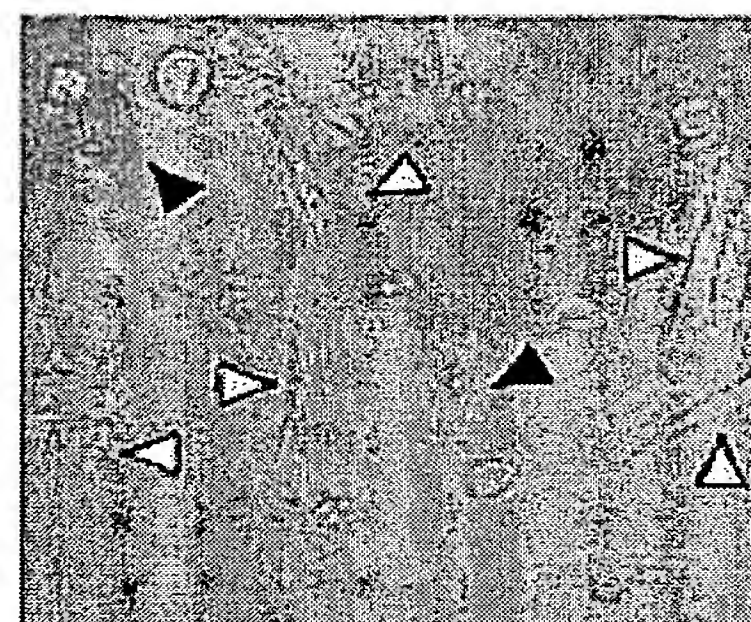


FIG. 12G

